

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I declare that I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Nucleic Acids, Proteins, and Antibodies

the specification of which is being filed concurrently herewith.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

Priority Claimed
Yes No

(Number) (Country) (Day/Month/Year Filed)

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

Application Number	Filing Date
60/179,065	31-Jan-2000
60/180,628	04-Feb-2000
60/214,886	28-Jun-2000
60/217,487	11-Jul-2000
60/225,758	14-Aug-2000
60/220,963	26-Jul-2000
60/217,496	11-Jul-2000
60/225,447	14-Aug-2000
60/218,290	14-Jul-2000
60/225,757	14-Aug-2000
60/226,868	22-Aug-2000
60/216,647	07-Jul-2000
60/225,267	14-Aug-2000
60/216,880	07-Jul-2000
60/225,270	14-Aug-2000
60/251,869	08-Dec-2000
60/235,834	27-Sep-2000

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60/234,274	21-Sep-2000
60/234,223	21-Sep-2000
60/228,924	30-Aug-2000
60/224,518	14-Aug-2000
60/236,369	29-Sep-2000
60/224,519	14-Aug-2000
60/220,964	26-Jul-2000
60/241,809	20-Oct-2000
60/249,299	17-Nov-2000
60/236,327	29-Sep-2000
60/241,785	20-Oct-2000
60/244,617	01-Nov-2000
60/225,268	14-Aug-2000
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60/234,997	25-Sep-2000
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60/226,681	22-Aug-2000
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60/225,213	14-Aug-2000
60/227,182	22-Aug-2000
60/225,214	14-Aug-2000
60/235,836	27-Sep-2000
60/230,438	06-Sep-2000
60/215,135	30-Jun-2000

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60/184,664	24-Feb-2000
60/189,874	16-Mar-2000
60/198,123	18-Apr-2000
60/227,009	23-Aug-2000
60/235,484	26-Sep-2000
60/190,076	17-Mar-2000
60/209,467	07-Jun-2000
60/205,515	19-May-2000
60/259,678	05-Jan-2001

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(b) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

(Application Serial No.)

(Filing Date)

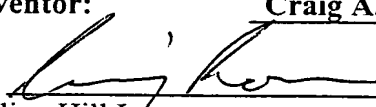
(Status: patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: James H. Davis (Reg. No. 40,582), Kenley K. Hoover (Reg. No. 40,302), Joseph J. Kenny (Reg. No. 43,710), Jonathan L. Klein (Reg. No. 41,119), and Michele M. Wales (Reg. No. 43,975) of Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, Maryland, 20850.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States

Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventor: Craig A. Rosen

Inventor's signature: 

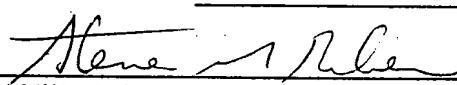
Date: 1/16/01

Residence: 22400 Rolling Hill Lane
Laytonsville, MD 20882

Citizenship: US

Post Office Address: same as above

Full name of second joint inventor: Steven M. Ruben

Inventor's signature: 

Date: 1/16/01

Residence: 18528 Heritage Hills Drive
Olney, MD 20832

Citizenship: US

Post Office Address: same as above

Full name of third joint inventor: Steven C. Barash

Inventor's signature: 

Date: 1/15/01

Residence: 111 Watkins Pond Blvd. #301,
Rockville, MD 20850

Citizenship: US

Post Office Address: same as above

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PJZ 08
UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APRIL 17, 2001

HUMAN GENOME SCIENCES, INC.
KENLEY K. HOOVER
9410 KEY WEST AVENUE
ROCKVILLE, MD 20850

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HGS PATENT DEPT

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/17/2001

REEL/FRAME: 011487/0791

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ROSEN, CRAIG A.

DOC DATE: 01/16/2001

ASSIGNOR:

RUBEN, STEVEN M.

DOC DATE: 01/16/2001

ASSIGNOR:

BARASH, STEVEN C.

DOC DATE: 01/15/2001

ASSIGNEE:

HUMAN GENOME SCIENCES, INC.
9410 KEY WEST AVENUE
ROCKVILLE, MARYLAND 20850

SERIAL NUMBER: 09764863


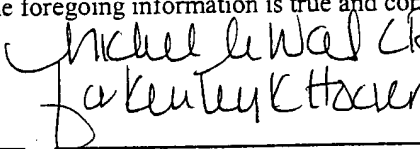
FILING DATE:

PATENT NUMBER:

ISSUE DATE:

011487/0791 PAGE 2

JEEVON JONES, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

1-17-01 U.S. P. BOX ASSIGNMENTS Case Docket No. PJZ08	02-07-2001  101606868	OFFICE U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
RECORDATION FORM COVER SHEET PATENTS ONLY To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.		
1. Name of conveying party(ies): Craig A. Rosen Steven M. Ruben Steven C. Barash Additional name(s) of conveying party(ies) attached? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	2. Name and address of receiving party(ies): Name: Human Genome Sciences, Inc. Street Address: 9410 Key West Avenue City: Rockville, Maryland 20850 Additional name(s) of conveying party(ies) attached? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
3. Nature of conveyance <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Execution Date: 01/16/01, 01/16/01, 01/15/01		
4. Title Nucleic Acids, Proteins, and Antibodies		
5. Application number (s) or patent numbers (s) 09/764863 If this document is being filed together with a new application, the execution date of the application is <u>01/16/01, 01/16/01, 01/15/01</u>		
6. Name and address of party to whom correspondence concerning documents should be mailed: Human Genome Sciences, Inc. 9410 Key West Avenue Rockville, Maryland 20850 Telephone: 301-309-8504 Facsimile: 301-309-8439		
7. Total of applications and patents involved <u>1</u>		
8. Total Fee (37 CFR 3.41) \$40.00 <input type="checkbox"/> Enclosed (By check in total of filing fee and Assignment Recordation Fee) <input checked="" type="checkbox"/> Authorized to be charged to Deposit Account		
9. Deposit Account No. 08-3425 (Attached duplicated copy of this page if paying by deposit account)		
10. If any additional fees due in connection with the recordation of this Assignment, please charge the same to Deposit No. 08-3425		
11. Statement and Signature The best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.		
Kenley K. Hoover Name of Person Signing 40,302 Registration No.	 Signature	11/7/2001 Date
Total number of pages including cover sheet, attachment, and documents 3		

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ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Craig A. Rosen, Steve M. Ruben, and Steve C. Barash, hereby sells, assigns, transfers, and sets over to **Human Genome Sciences, Inc.** ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his/her entire right, title and interest, including the right to sue and collect for all past, present and future damages, for the United States of America, including all its territories and possessions, and all other countries,

- (a) in and to the invention(s) known as Nucleic Acids, Proteins, and Antibodies which application for patent in the United States of America has (have) been executed by the undersigned and filed concurrently as Attorney Docket Number PJZ08 in any and all applications thereon, in any and all Patent(s) therefor, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing (continuation, divisional) applications, reissues, extensions, renewals and reexaminations of the patent application or patent therefor listed above in part (a), to the full extent of the term or terms for which patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals, and examinations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

Each of the undersigned further agrees that said Assignee may apply for and receive patent(s) for said invention(s) in its own name; and agrees to execute all papers necessary in connection with said application(s) and any continuing application(s) (continuation, divisional, or continuation-in-part), substitutes, renewals, reissues, reexaminations, extensions, and all other patent applications on all such invention(s), including all rightful oaths, declarations, powers of attorney and other papers; and agrees to execute separate assignments in connection with such application(s) as the Assignee may deem necessary and expedient; and agrees to communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said invention(s) and the history thereof; and agrees to cooperate fully and completely with said Assignee, its successors, assigns, and representatives in securing, maintaining, and enforcing proper patent protection for said invention(s) and for vesting title to said invention(s) and all patent applications and all patents on said invention(s) in Assignee, its successors, assigns and representatives.

Each of the undersigned agrees to execute all papers necessary in connection with any interference that may be declared or litigation that may be instituted concerning the application(s) or patent(s) referred to above and to cooperate fully and completely with the Assignee, its successors, assigns, and representatives in obtaining evidence and going forward with such interference or litigation, including providing testimonial evidence.

Each of the undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

Each of the undersigned hereby grants the power to James H. Davis (Reg. No. 40,582), Kenley K. Hoover (Reg. No. 40,302), Michele M. Wales (Reg. No. 43,975), Jonathan L. Klein (Reg. No. 41,119), and Joseph J. Kenny (Reg. No. 43,710) of Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, MD, 20850 to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature: [Signature] Date: 1/16/01

Inventor's Signature: [Signature] Date: 1/16/01

Inventor's Signature: [Signature] Date: 1/15/01